

WHAT IS CLAIMED IS:

1. A liquid crystal display, comprising:

plural display panels, adjoining display panels being connected with each other by means of a bonding agent, so as to have a single display screen,

wherein at least one edge portion of an end surface of a connected part of each display panel is chamfered.

2. The display device as set forth in claim 1, wherein:

each display panel is a liquid crystal display panel including a pair of substrates which sandwich a liquid crystal.

3. The display device as set forth in claim 2, wherein:

the bonding agent is made of a material of an index of refraction substantially equal to that of said pair of substrates.

4. The display device as set forth in claim 3, further comprising:

a reinforcing substrate bonded to each respective liquid crystal display panel by means of the bonding

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agent, said reinforcing substrate having an index of refraction substantially equal to that of said pair of substrates.

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5. The display device as set forth in claim 4, wherein:

each liquid crystal display panel and said reinforcing substrate are sandwiched by a pair of polarization plates whose polarization axes intersect at right angles.

6. The display device as set forth in claim 5, wherein one of said pair of substrates includes:

plural pixel electrodes placed in a matrix form, plural signal electrodes for supplying an image signal to each pixel electrode and plural scanning electrodes provided as an electric wiring, and

plural active elements connected to each pixel electrode, for controlling a supply of an image signal to each pixel electrode, and

an other of said pair of substrates includes:

a black matrix for blocking light entering spaces between said pixel electrodes or incident on said active element,

a color filter composed of filters in red, green and blue arranged in a prescribed pattern corresponding to respective pixel electrodes, and

a common electrode provided opposing the pixel electrode, for applying a voltage to the liquid crystal together with said pixel electrodes.

7. A manufacturing process of a display device which comprises plural display panels, adjoining display panels being connected with each other by means of a bonding agent, so as to have a single display screen, comprising the step of:

grinding at least one edge portion of an end surface of a connected part of each display panel, in an arc shape, by means of a grindstone.

8. A display device, comprising:

plural display panels, adjoining display panels being connected with each other by means of a bonding agent, so as to have a single display screen,

wherein an interval between the adjoining display panels is not more than 50 μm .

9. The display device as set forth in claim 8,

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wherein:

each display panel is a liquid crystal display panel including a pair of substrates which sandwich a liquid crystal.

10. The display device as set forth in claim 9,
wherein:

said bonding agent is composed of a material of an index of refraction of substantially equal to that of said pair of substrates.

11. The display device as set forth in claim 10,
comprising:

a reinforcing substrate bonded to each liquid crystal display panel by means of the bonding agent, said reinforcing substrate having an index of refraction substantially equal to that of said pair of substrates.

12. The display device as set forth in claim 11,
wherein:

each liquid crystal display panel and said reinforcing substrate are sandwiched by a pair of polarization plates whose polarization axes intersect at right angles.

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13. The display device as set forth in claim 12,
wherein one of said pair of substrates includes:

plural pixel electrodes provided in a matrix form,
plural signal electrodes for supplying an image
signal to each pixel electrode and plural scanning
electrodes provided as an electric wiring, and

plural active elements connected to each pixel
electrode, for controlling a supply of an image signal to
each pixel electrode, and

an other of said pair of substrates includes:

a black matrix for blocking light entering spaces
between said pixel electrodes or incident on said active
element,

a color filter composed of filters in red, green and
blue arranged in a prescribed pattern corresponding to
respective pixel electrodes, and

a common electrode provided opposing the pixel
electrode, for applying a voltage to the liquid crystal
together with the pixel electrode.

14. A display device, comprising:

plural display panels, adjoining display panels
being connected with each other by means of a bonding
agent, so as to have a single display screen,

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wherein after being hardened, the bonding agent has
a flexural modulus of elasticity of not more than 4,000
kgf/cm².

15. The display device as set forth in claim 14,
wherein:

each display panel is a liquid crystal display panel
including a pair of substrates which sandwich a liquid
crystal.

16. The display device as set forth in claim 15,
wherein:

said bonding agent is made of a material having an
index of refraction substantially equal to that of said
pair of substrates.

17. The display device as set forth in claim 16,
comprising:

a reinforcing substrate bonded to each liquid crystal
display panel by means of the bonding agent, said
reinforcing substrate having an index of refraction
substantially equal to that of said pair of substrates.

18. The display device as set forth in claim 17,

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wherein:

each liquid crystal display panel and said reinforcing substrate are sandwiched by a pair of polarization plates whose polarization axes intersect at right angles.

19. The display device as set forth in claim 18, wherein one of said pair of substrates includes:

plural pixel electrodes placed in a matrix form,

plural signal electrodes for supplying an image signal to each pixel electrode and plural scanning electrodes provided as an electric wiring, and

plural active elements connected to each pixel electrode, for controlling a supply of an image signal to each pixel electrode, and

an other of said pair of substrates includes:

a black matrix for blocking light entering spaces between said pixel electrodes or incident on said active element,

a color filter composed of filters in red, green and blue arranged in a prescribed pattern corresponding to respective pixel electrodes, and

a common electrode provided opposing the pixel electrode, for applying a voltage to the liquid crystal

together with the pixel electrode.

20. A display device, comprising:

plural display panels, adjoining display panels being connected with each other by means of a bonding agent, so as to have a single display screen,

wherein an end surface of a connected part of each display panel has a cut surface finishing precision of not more than 2 μm

21. The display device as set forth in claim 20, wherein:

each display panel is a liquid crystal display panel including a pair of substrates which sandwich a liquid crystal.

22. The display device as set forth in claim 21, wherein:

the bonding agent is made of a material of an index of refraction substantially equal to that of said pair of substrates.

23. The display device as set forth in claim 22, comprising:

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a reinforcing substrate bonded to each liquid crystal display panel by means of the bonding agent, said reinforcing substrate having an index of refraction substantially equal to that of said pair of substrates.

24. The display device as set forth in claim 23, wherein:

each liquid crystal display panel and said reinforcing substrate are sandwiched by a pair of polarization plates whose polarization axes intersect at right angles.

25. The display device as set forth in claim 24, wherein one of said pair of substrates includes:

plural pixel electrodes placed in a matrix form,

plural signal electrodes for supplying an image signal to each pixel electrode and plural scanning electrodes provided as an electric wiring, and

plural active elements connected to each pixel electrode, for controlling a supply of an image signal to each pixel electrode, and

an other of said pair of substrates includes:

a black matrix for blocking light entering spaces between said pixel electrodes or incident on said active

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element,

a color filter composed of filters in red, green and blue arranged in a prescribed pattern corresponding to respective pixel electrodes, and

a common electrode provided opposing the pixel electrode, provided as an electric wiring, for applying a voltage to the liquid crystal together with the pixel electrode.

26. A display device, comprising:

plural display panels, adjoining display panels being connected with each other by means of a bonding agent, so as to have a single display screen,

wherein an end surface of a connected part of each display panel has a cut surface positioning precision of not more than 10 μm .

27. The display device as set forth in claim 26, wherein:

each display panel is a liquid crystal display panel including a pair of substrates which sandwich a liquid crystal.

28. The display device as set forth in claim 27,

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wherein:

said bonding agent is made of a material having an index of refraction substantially equal to that of said pair of substrates.

29. The display device as set forth in claim 28, further comprising:

a reinforcing substrate bonded to each liquid crystal display panel by means of the bonding agent, said reinforcing substrate having an index of refraction substantially equal to that of said pair of substrates.

30. The display device as set forth in claim 29, wherein:

each liquid crystal display panel and the reinforcing substrate are sandwiched by a pair of polarization plates whose polarization axes intersect at right angles.

31. The display device as set forth in claim 30, wherein one of said pair of substrates includes:

plural pixel electrodes placed in a matrix form, plural signal electrodes for supplying an image signal to each pixel electrode and plural scanning electrodes provided as an electric wiring, and

plural active elements connected to each pixel electrode, for controlling a supply of an image signal to each pixel electrode, and

an other of said pair of substrates includes:

a black matrix for blocking light entering spaces between said pixel electrodes or incident on said active element,

a color filter composed of filters in red, green and blue arranged in a prescribed pattern corresponding to respective pixel electrodes, and

a common electrode provided opposing the pixel electrode, for applying a voltage to the liquid crystal together with said pixel electrodes.



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